

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A catalytically active amorphous porous solid, comprising:

a mixed oxide of silicon, aluminum, and phosphorus, ~~characterized by~~
wherein an atomic ratio Si/Al ranging from 10 to 250, a P/Al ratio of at least 0.1 and not higher than 3.5, a total pore volume ranging from 0.5 to 2.0 ml/g, with an average diameter ranging from 3 to 40 nm, and a specific surface area ranging from 200 to 1000 m²/g.

Claim 2 (Original): The solid according to claim 1, wherein, in the mixed oxide, said atomic ratio Si/Al ranges from 15 to 200 and said atomic ratio P/Al ranges from 0.3 to 3.5.

Claim 3 (Currently Amended): The solid according to claim 1 ~~or 2~~, wherein said pore volume ranges from 0.7 to 1.7 ml/g, with an average diameter ranging from 5 to 30 nm, and said surface area ranges from 300 to 900 m²/g.

Claim 4 (Currently Amended): The solid according to ~~any of the previous claims~~
claim 1, wherein the difference between 10% and 90% of the pore dimensions in the distribution curve is within a diameter range of 2 to 40 nm.

Claim 5 (Currently Amended): The solid according to ~~any of the previous claims~~
claim 1, comprising at least 95% by weight of said mixed oxide and up to 5% by weight of at least one oxide of a metal selected from the group consisting of Ti, Zr, V, Cr, Fe, Co, Ni, Pt, Pd, Mo, Zn, Ga, and Sn.

Claim 6 (Currently Amended): A catalytically active solid composition comprising from 30 to 99% by weight of the amorphous porous solid according to ~~any of the previous claims~~ claim 1, and from 70 to 1% by weight of an inert inorganic binder.

Claim 7 (Original): The composition according to claim 6, comprising from 50 to 80% by weight of said amorphous porous solid and from 50 to 20% by weight of said inert inorganic binder.

Claim 8 (Currently Amended): The composition according to ~~any of the previous claims 6 and 7~~ claim 6, wherein said inert binder is selected from silica, alumina, clay, titanium oxide (TiO_2), zirconium oxide (ZrO_2), boron oxide (B_2O_3), or mixtures thereof.

Claim 9 (Currently Amended): The composition according to ~~any of the previous claims from 6 to 8~~ claim 6, wherein said inert binder essentially consists of alumina.

Claim 10 (Currently Amended): The composition according to ~~one of the previous claims from 6 to 9~~ claim 6, having the form of pellets with a diameter of 2 to 5 mm and a length of 2 to 10 mm.

Claim 11 (Currently Amended): Use of the amorphous porous solid according to ~~any of the previous claims from 1 to 5~~ claim 1, ~~or of the composition according to any of the previous claims from 6 to 10~~, as catalyst or active catalyst carrier in acid catalyzed industrial processes.

Claim 12 (Original): Use according to claim 11, in alkylation, isomerization processes and in the oligomerization of hydrocarbons.

Claim 13 (Currently Amended): Use according to the previous claim 11 ~~or 12~~, in processes comprising hydro-dehydrogenation reactions.

Claim 14 (Original): Use according to claim 13, in hydrocracking, hydroisomerization processes and in the dewaxing of hydrocarbons.

Claim 15 (Currently Amended): A process for the preparation of a porous solid according to ~~any of the previous claims from 1 to 5~~ claim 1, comprising the following steps in succession:

- (i) ~~preparation of~~ preparing an aqueous mixture comprising a tetra-alkyl ammonium hydroxide, a hydrolyzable aluminum compound, a hydrolyzable silicon compound and an oxygenated compound of phosphorus in such proportions as to have an atomic ratio Si/Al ranging from 10 to 250 and a P/Al atomic ratio ranging of from 0.1 to 3.5, and a sufficient quantity of water to dissolve and hydrolyze said compounds;
- (ii) heating of said mixture in an alkaline environment, ~~preferably maintaining the pH at a value greater than 10, and~~ so that there is essentially no exchange of material with the outside, to obtain the formation of a gel; and

- (iii) drying and ~~calcination of~~ calcinating the gel of ~~step~~ (ii) to obtain the desired amorphous porous solid.

Claim 16 (Currently Amended): The process according to claim 15, wherein said aluminum compound is an aluminum trialkoxide comprising from 1 to 10 carbon atoms in each alkoxide residue, said hydrolyzable silicon compound is a silicate of at least one hydrocarbon residue, ~~preferably a tetraalkylorthosilicate~~, comprising from 1 to 10 carbon atoms for each alkyl residue, and said oxygenated compound of phosphorus is a phosphoric or a phosphonic salt, or an ester, or ~~the~~ a corresponding acid.

Claim 17 (Currently Amended): The process according to claim 16, wherein said phosphorus compound is an ammonium salt or an ester of the phosphoric or phosphonic acid ~~in which~~ wherein each alkyl residue comprises from 1 to 10 carbon atoms.

Claim 18 (Currently Amended): The process according to ~~any of the claims from 15 to 17~~ claim 15, wherein, in ~~step~~ (I), the following atomic or molar ratios are used: Si/Al from 10/1 to 250/1, tetraalkyl ammonium hydroxide/Si from 0.05/1 to 0.2/1, H₂O/Si from 5/1 to 40/1, and P/Al from 0.1 to 5.0.

Claim 19 (Currently Amended): The process according to ~~any of the claims from 15 to 18~~ claim 15, wherein, in ~~step~~ (i), the mixture is heated to a temperature ranging from 30 to 80°C until a limpid solution is obtained.

Claim 20 (Currently Amended): The process according to ~~any of the claims from 15 to 19~~claim 15, wherein, in ~~step~~-(ii), said heating is effected at a pH ranging from 11 to 12 and to a temperature ranging from 60 to 120°C, operating in a closed vessel at autogenous pressure of the system, or at atmospheric pressure with refluxing, for a time ranging from 10 minutes to 3 hours.

Clam 21 (Currently Amended): The process according to ~~any of the claims from 15 to 20~~claim 15, wherein, in ~~step~~-(ii), an alcohol, having from 1 to 10 carbon atoms, ~~preferably ethanol,~~ is added to the mixture up to an alcohol/Si ratio of 8/1.

Claim 22 (Currently Amended): The process according to ~~any of the claims from 15 to 21~~claim 15, further comprising an aging step of the gel of for 1 to 24 hours at the end of ~~step~~-(iii).

Claim 23 (Currently Amended): A process for the preparation of the solid composition according to ~~any of the previous claims from 6 to 10~~claim 6, comprising: ~~the formulation of~~ forming a mixture ~~containing that comprises~~ from 30 to 99% by weight of the amorphous porous solid according to ~~any of the previous claims from 1 to 5~~claim 1, and from 70 to 1% by weight of an inert inorganic binder.

Claim 24 (Currently Amended): The process according to claim 23, wherein said porous solid is in the form of a humid gel and is mixed with said binder with a weight ratio between the binder and the gel ranging from 0.05 to 0.5.

Claim 25 (Currently Amended): The process according to ~~one of the previous claims 23 or 24~~ claim 23, wherein said mixture also comprises a plasticizing agent selected from methyl cellulose, stearine, and glycerol, ~~preferably methyl cellulose in a quantity ranging from 5 to 20 g per 100 g of binder.~~

Claim 26 (Currently Amended): The process according to ~~one of the previous claims from 23 to 25~~ claim 23, wherein an organic acid is added to said mixture in a quantity ranging from 0.5 to 8 g per 100 g of binder.

Claim 27 (Currently Amended): The process according to ~~one of the previous claims from 23 to 26~~ claim 23, wherein said mixture is homogenized by mixing and heating to a temperature ranging from 40 to 90°C, until a paste is obtained, ~~it~~ the paste is then extruded into cylindrical granules having a size of 2-10 mm in length and 0.5-4.0 mm in diameter, and is finally dried and calcined.